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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,129	02/15/2001	Dong-seek Park	Q58599	1492

			EXAMINER
7590	02/08/2005		TON, ANTHONY T

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ART UNIT	PAPER NUMBER
2661	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/783,129	PARK ET AL.
	Examiner	Art Unit
	Anthony T Ton	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 September 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-9</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

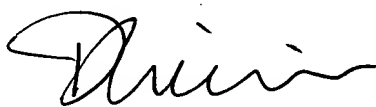**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 February 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/29/04</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to because the following informalities:

The "NO" - "YES" condition at step 730 in **Fig.7** is not associated with the description of

the specification in page 9 lines 10-13. Also, this condition does not support the claimed subject

matter "discarding a previous frame in a case where there is some error" as claimed in **Claim 7**.

Examiner suggests swapping "NO" and "YES" for each other.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement drawing

sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement

Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the

drawing figures. If the changes are not accepted by the examiner, the applicant will be notified

and informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3.   **Claims 1** and **2** are rejected under 35 U.S.C. 102(a) as being anticipated by *Inoue*

(Japanese Patent No. JP 11088301 A).

        a) **In Regarding to Claim 1:** *Inoue* disclosed a wireless packetization method in a radio

transmitting/receiving system for transmitting and/or receiving multimedia data in a wireless

environment, comprising the steps of:

        dividing multimedia data-related header information into one portion and a plurality of

portions, respectively *(see Fig. 1, and solution in abstract: a packet marker (PM) for dividing the*

AL3-SDU into plural numbers); and

        adding error checking or protection codes to each of the divided header information *(see*

Fig. 1: CRC; and solution in abstract: adding an extension field and a CRC field to each and

indicating connection information of a header in the extension field and the PM for indicating

the final header).

        b) **In Regarding to Claim 2:** *Inoue* further disclosed the error checking or protection

codes are cyclic redundancy codes (CRC) *(see Fig. 1: CRC, and abstract: adding an extension*

field and a CRC field to each and indicating connection information of a header).

4.   **Claim 3** is rejected under 35 U.S.C. 102(a) as being anticipated by ETSI TS 125 322

V3.1.2 (2000-01), UMTS, RLC Protocol Specification (3G TS 25.322 Version 3.1.2 Release

1999) (XP-002168713), hereinafter referred to as *ETSI*.

In Regarding to Claim 3: *ETSI* disclosed a wireless packetization method in a radio

transmitting/receiving system for transmitting and/or receiving multimedia data in a wireless

environment, comprising the steps of:

adding a length field and a length indicator field *(see Fig.9.3: HE (length indicator) in*

octet 2 and Length Indicator (length field) in octet 3), wherein the length field indicates the

length of data in a data region *(see section 9.2.2.8: Length Indicator)* and the length indicator

field identifies the length of the length field on a multiplex (MUX) layer *(see section 9.2.2.7:*

Header Extension Type (HE) for the value of two combinations of the two bits in the HE: 01 and

10) where the multimedia data are multiplexed into predetermined units of header information

(see Fig.9.3: for an AMD PDU).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   **Claims 4-6** and **8** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Inoue*

(Japanese Patent No. JP 11088301 A) in view of **ETSI TS 125 322 V3.1.2 (2000-01), UMTS;**

RLC Protocol Specification (3G TS 25.322 Version 3.1.2 Release 1999) (XP-002168713).

a) **In Regarding to Claim 4:** *Inoue* disclosed a wireless packetization method in a radio

transmitting/receiving system for transmitting and/or receiving multimedia data in a wireless

environment, comprising the steps of:

forming a predetermined protocol frame by adding error checking or protection codes to

both the length field and the length indicator field *(see Fig.1: CRC; and solution in abstract:*

adding an extension field and a CRC field to each and indicating connection information of a

header in the extension field and the PM for indicating the final header).

Inoue fails to explicitly disclose adding a length field and a length indicator field ,

wherein the length field indicates the length of data in a data region and the length indicator field

identifies the length of the length field on a multiplex (MUX) layer where the multimedia data

are multiplexed into predetermined units of header information.

ISTI explicitly disclosed such adding a length field and a length indicator field , wherein

the length field indicates the length of data in a data region and the length indicator field

identifies the length of the length field on a multiplex (MUX) layer where the multimedia data

are multiplexed into predetermined units of header information *(see Fig.9.3: HE and Length*

Indicator fields, AMD PDU, and sections 9.2.2.8 and 9.2.2.7).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to

implement such adding a length field and a length indicator field , wherein the length field

indicates the length of data in a data region and the length indicator field identifies the length of

the length field on a multiplex (MUX) layer where the multimedia data are multiplexed into

predetermined units of header information, as taught by *ETSI* with *Inoue,* so that a multimedia

communications packet can be implemented in different modes with appropriate lengths,

respectively. The motivation for doing so would have been to provide enhanced services to

Inoue in wireless multimedia communications networks. Therefore, it would have been obvious

to combine *ETSI* with *Inoue* in the invention as specified in the claim.

    b) In Regarding to Claim 5: *Inoue* all aspects of the claim 5 as set forth in claim 4; and

Inoue inherently disclosed the error protection codes comprising: a first error protection

code for error-protecting the length indicator field in the header information; and a second error

protection code for error-protecting the length field because *Inoue* a CRC field is added into

each of AL3-SDU and AL2-SDU units of a multiplexed PDU packet for a purpose of data

information in such each of AL3-SDU and AL2-SDU units can be evaluated properly *(see

Fig.1: CRC fields)*.

    c) In Regarding to Claim 6: *Inoue* disclosed all aspects of this claim as set forth in

claims 4 and 5.

    Inoue fails to explicitly disclose the first error protection code and the second error

protection code are comprised of 4 bits or 8 bits for controlling an error of the header-divided

region.

    ISTI explicitly disclosed such the first error protection code and the second error

protection code are comprised of 4 bits or 8 bits for controlling an error of the header-divided

region *(see Fig.9.3: HE and Length Indicator fields, AMD PDU, and sections 9.2.2.8 and

9.2.2.7)*.

    At the time of the invention, it would be obvious to a person of ordinary skilled in the art

can provide such 4 bits or 8 bits throughout the CRC fields of the multiplex transmission

method of *Inoue* as a design choice because the length of CRC fields depending on the length of

a packet or a frame. The motivation being to provide enhanced services in a wireless

multimedia communications network of the *ETSI* in different platforms of packets.

d) In Regarding to Claim 8: The claimed subject matters disclosed in this claim are the

same as that in the Claim 4. Therefore, the rejections in the Claim 4 would apply to this claim in

an apparatus as taught.

7.   **Claims 7 and 9 are** rejected under 35 U.S.C. 103(a) as being unpatentable over *Kurobe et*

al. (US Patent No. 6,233,251) in view of *Yamanaka et al.* (US Patent No. 5,936,965), hereinafter

referred to as *Kurobe* and *Yamanaka*, respectively.

a) In Regarding to Claim 7: *Kurobe* disclosed a method for decoding a wireless packet

by receiving a packet in which error protection codes are added to one portion and a plurality of

portions of header information, respectively, on a wireless multiplex (MUX) sub-layer in a

multimedia data transmitting system, comprising the steps of:

discarding the previous frame in a case where there is some error and checking a second

error protection code added to the next header information in a case where there is no error,

when a first error protection code added to the initial header information is checked *(see col.28*

line 61- col.29 line 2); and

transmitting data to an upper layer in a case where there is no error, when the second

error protection code is checked *(see col.28 lines 51-60)*.

Kurobe failed to explicitly transmitting a blank data block to the upper layer in a case

where there is some error, when the second error protection code is checked.

Yamanaka explicitly disclosed such transmitting a blank data block to the upper layer in a case where there is some error, when the second error protection code is checked *(see Fig.3: Null packet (blank packet), and Fig.5: steps 1000, 1004 and 1006)*.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to implement such transmitting a blank data block to the upper layer in a case where there is some error, when the second error protection code is checked, as taught by *Yamanaka* with *Kurobe,* in order to detect loss of transport stream packets. The motivation for doing so would have been to perform error control correctly at higher layers (see *Yamanaka: col.2 lines 17-19)*. Therefore, it would have been obvious to combine *Yamanaka* with *Kurobe* in the invention as specified in the claim.

b) **In Regarding to Claim 9:** The claimed subject matters disclosed in this claim are the same as that in the Claim 7. Therefore, the rejections in the Claim 7 would apply to this claim in an apparatus as taught.

Response to Remarks

8.   Applicant's arguments with respect to **claims 1-9** have been respectfully re-considered but are moot in view of the new ground(s) of rejection.

9.   In order to response properly to the claims, the Examiner decides to add new references, *Inoue* (Japanese Patent No. JP 11088301 A); ETSI TS 125 322 V3.1.2 (2000-01), UMTS, RLC Protocol Specification (3G TS 25.322 Version 3.1.2 Release 1999) (XP-002168713); and *Yamanaka et al.* (US Patent No. 5,936,965), which are new discovered references applied for the new ground(s) rejections as set forth in this Office Action.

Examiner Information

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The

examiner can normally be reached on **M-F: 9:00 am - 5:30 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Chau T Nguyen** can be reached on **571-272-3126**. The fax phone number for the

organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Respectfully submitted,

by: _____
Anthony T. Ton
Patent Examiner
January 26, 2005

PHIRIN SAM
PRIMARY EXAMINER